

**Project WET
Connections to KY
Core Content 4.1**

Aqua Bodies p.63

Elementary

Science

SC-EP-3.4.1

Students will explain the basic needs of organisms.

Organisms have basic needs. For example, animals need air, water and food; plants need air, water, nutrients and light. Organisms can survive only in environments in which their needs can be met.

DOK 2 SC-04-3.4.1

Students will:

- compare the different structures and functions of plants and animals that contribute to the growth, survival and reproduction of the organisms;
- make inferences about the relationship between structure and function in organisms.

Each plant or animal has structures that serve different functions in growth, survival and reproduction. For example, humans have distinct body structures for walking, holding, seeing and talking. Evidence about the relationship between structure and function should be used to make inferences and draw conclusions.

SC-05-3.4.1

Students will describe and compare living systems to understand the complementary nature of structure and function.

Observations and comparisons of living systems at all levels of organization illustrate the complementary nature of structure and function. Important levels of organization for structure and function include cells, tissues, organs, organ systems, organisms (e.g., bacteria, protists, fungi, plants, animals), and ecosystems. Examining the relationship between structure and function provides a basis for comparisons and classification schemes.

Mathematics

MA-EP-1.2.1

Students will apply and describe appropriate strategies for estimating quantities of objects and computational results (limited to addition and subtraction).

DOK 2

MA-04-1.2.1

Students will apply and describe appropriate strategies for estimating quantities of objects and computational results.

DOK 2

MA-05-1.2.1

Students will apply and describe appropriate strategies for estimating quantities of objects and computational results in real-world problems.

DOK 2

MA-EP-2.1.4

Students will use nonstandard and standard units of measurement to identify measurable attributes of an object (length – in, cm; weight – oz, lb) and make an estimate using appropriate units of measurement.

MA-04-2.1.4

Students will use measurements to describe and compare attributes of objects to include length (in, ft, yd, mile; cm, m, km), width, height, money (cost), temperature and weight (oz, lb, ton; g, kg); sort objects and compare attributes of objects.

MA-EP-2.1.5

Students will use units of measurement to describe and compare attributes of objects to include length (in, cm), width, height, money (cost), temperature (F) and weight (oz, lb), and sort objects and compare attributes by shape, size and color.

MA-EP-2.1.6

Students will estimate weight, length, perimeter, area, angle measures and time using appropriate units of measurement.

MA-04-2.1.6

Students will estimate weight, length, perimeter, area, angle measures and time using appropriate units of measurement.

MA-05-2.1.6

Students will estimate weight, length, perimeter, area, angle measures and time using appropriate units of measurement.

DOK 2

MA-EP-2.2.1

Students will describe, define, give examples of and use to solve real-world and mathematical problems nonstandard and standard (U.S. Customary, metric) units of measurement to include length (in., cm.), time, money, temperature (Fahrenheit) and weight (oz., lb).

MA-04-2.2.1

Students will describe, define, give examples of and use to solve real-world and mathematical problems nonstandard and standard (U.S. Customary, metric) units of measurement (e.g., weight - oz., lbs., tons, g, kg; length – in., ft., yd., mile, cm, m, km; area in square units) and money.

MA-EP-4.1.3

Students will organize and display data.

MA-04-4.1.3

Students will construct data displays (pictographs, bar graphs, line plots, Venn diagrams, tables).

DOK 2

MA-05-4.1.3

Students will construct data displays (pictographs, bar graphs, line plots, line graphs, Venn diagrams, tables).

DOK 2

Middle School

Mathematics

MA-06-1.1.1

Students will provide examples of and identify fractions, decimals and percents.

DOK 1

MA-07-1.1.1

Students will provide examples of and identify integers, fractions, decimals, percents and π .

DOK 1

MA-08-1.1.1

Students will provide examples of and identify rational numbers and irrational numbers (square roots and π only).

DOK 1

MA-06-1.1.3

Students will convert between any two of the following numbers: fractions, decimals, and percents (less than or equal to 100%); and will compare and order these numbers.

DOK 2

MA-07-1.1.3

Students will convert among whole numbers, fractions, decimals, percents and π , and will compare and order these numbers.

DOK 2

MA-08-1.1.3

Students will convert, compare and order multiple numerical representations (e.g., fractions, decimals, percentages) of rational numbers and irrational numbers (square roots and π only).

DOK 2

MA-06-1.2.1

Students will estimate to solve real-world and mathematical problems with whole numbers, fractions, decimals and percents, checking for reasonable and appropriate computational results.

DOK 2

MA-07-1.2.1

Students will estimate to solve real-world and mathematical problems with fractions, decimals and percents, checking for reasonable and appropriate computational results.

DOK 2

MA-08-1.2.1

Students will estimate to solve real-world and mathematical problems with rational numbers, checking for reasonable and appropriate computational results.

DOK 2

MA-06-2.1.2

Students will estimate measurements in standard units including fractions and decimals.

MA-07-2.1.2

Students will estimate measurements of regular and irregular polygons and circles in standard units.

MA-08-2.1.2

Students will estimate measurements in standard units in real-world and mathematical problems.

MA-06-2.2.1

Students will convert units within the same measurement system and use these units to solve real-world problems.

MA-07-2.2.1

Students will convert units within the same measurement system and use these units to solve real-world problems.

MA-08-2.2.1

Students will convert units within the same measurement system and use these units to solve real-world problems.

DOK 2

MA-06-4.1.1

Students will analyze and make inferences from data displays (drawings, tables/charts, pictographs, bar graphs, circle graphs, line plots, Venn diagrams, line graphs, stem-and-leaf plots).

DOK 3

MA-07-4.1.1

Students will analyze and make inferences from data displays (drawings, tables/charts, pictographs, bar graphs, circle graphs, line plots, Venn diagrams, line graphs, stem-and-leaf plots, scatter plots).

DOK 3

MA-08-4.1.1

Students will analyze and make inferences from data displays (drawings, tables/charts, pictographs, bar graphs, circle graphs, line plots, Venn diagrams, line graphs, stem-and-leaf plots, scatter plots, histograms, box-and-whiskers plots).

DOK 3